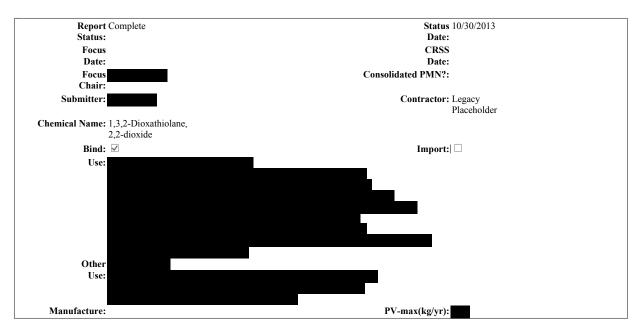
Focus Report for Case # L-13-0727

General



Categories



Levels of Concern

Occupational Exposure: 2	2B			
Bioaccumulation:				
	Persistence:	Bioaccumulation:	Toxicity:	PBT Comments:
	2	1	2	
Bioaccumulation Comments:				
Ecotox Rating 2:				
Health Rating 1: 2	2			
Health Rating 1 Comment:				
Health Rating 2:				
Health Rating 2 Comment:				
Toxicity Comments:				

SAT Assessment

```
Fate Summary:
                         L-13-0727
                         FATE:
                         Kow = -0.90 (E)
                          S > 10 \text{ g/L at } 25 \text{ C (E)}
                         VP = 4 4E-2 torr at 25
                         C (E)
                         BP = 209 \text{ C (E)}
                         H = 1 15E-6 (E)
                         log Koc = 0.97 (E)
                         log Fish BCF = 0.50 (E)
                         log Fish BAF = -0.05 (E)
                         POTW removal
                          (\%) = 0-25
                         Time for complete ultimate aerobic biodeg = wk
                         Sorption to soils/sediments = low
                          Volatilization half-life from a
                         standard river = 570 hrs
                          Volatilization half-life from a standard lake
                         = 260 da
                         Atmospheric Oxidation Half-life = 120 hr via OH radical
                         PBT Potential: P2B1
                         *CEB FATE: Migration to ground water =
                         rapid
    Health Summary:
                          Absorption is nil through the skin for the neat material,
                         moderate through the skin for the material in solution, and moderate
                          through the lung and GI tract, based on physical/chemical properties The
                         LVE substance is a potential alkylating agent There are concerns for severe irritation/possible corrosion to the eye, skin, and lung, dermal
                         sensitization, acute, liver and developmental toxicities, mutagenicity,
                         and oncogenicity, based on the
                                                                             and submitted test
SAT Risk Assessment:
```

Corrosive to male rabbit eyes, causing irreversible damage: test terminated after one day;
Corrosive to male rabbit skin, causing irreversible damage: test terminated after one day;
Dermal sensitizer in male guinea pigs

Ecotox: Ecotoxicity Values

Test organism	Test Type	Test Endpoint	Predicted	Measured	Comments
Fish	96-h	LC50	>100		
Daphnid	48-h	LC50	>100		
Green Algae	96-h	EC50	>100		
Fish	-	Chronic Value	>10		
Daphnid	-	Chronic Value	>10		
Green Algae	-	Chronic Value	>10		

Ecotox Value Comments:

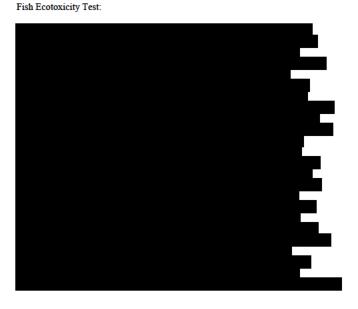
Predictions are based on SARs for esters; SAR chemical class = ester; with metal effective concentrations based on 100% active ingredients and nominal concentrations; hardness <150 0 mg/L as CaCO3; and TOC <2 0 mg/L;

Test data was submmitted for

Ecotoxicity Test Data Results
Case Number:

Chemical Name:

Initial Data Review







Ecotox Factors

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Aquatic:		10		
Chronic Aquatic:			1000	
Recommended Testing:				
Ecotox Factors Comments:				

Exposure Based Information:

Criteria		Value	Amount
1. Number of Workers Ex 1000?	0		
2. > 100 Workers With > 10 mg/Day Inhalation Exposure			
3a. > 100 Workers With 1-10 mg/Day Inhala	ation Exposure >100 Days/Yr	0	
3b. > 250 Workers With Routine Derma	al Contact > 100 Days/Yr	0	
Exposure Based Review (Chemistry): N	Exposure Based Revie	w (Health): N	
Exposure Based Review (Ecotox): N	upational): Y		
Exposure Based Review (Non-Occupational):	ed Review (Non-Occupational): Exposure Based Review (Occupational)		

Exposure/Release Summary

Engineering Summary Release

Exposures/Releases	Exposure	Exposure	
Scenario			
Site			
Media	Inhalation	Inhalation	
Descriptor A	Worst Case	Worst Case	
Quantity A (kg/site-day)			
Frequency A			
Descriptor B	Typica1	Typical	
Quantity B (kg/site-day)			
Frequency B		•	
From	Loading Liquid Product into Drums	Unloading Liquid Raw Material from Drums	
Workers			
ExposureType			

Exposure

Summary Release

Chemical ID:

Reviewer:

Exposure Scenario	Water					Land fill (non- sludge)	Sta	ack	Fug	itive	
Release		gestion									
Activity(ies) exposure Calculations	ADK	LADD mg/kg/day	ADR mg/kg/day	LADD mg/kg/day	7Q10cc ug/l	PDM Exceeded # Days	LADD mg/kg/day	ADR mg/kg/day	LADD mg/kg/day	ADR mg/kg/day	LADD mg/kg/day

- ${\bf 1. Exposure\ scenario\ titles\ consist\ of\ release\ activity\ followed\ by\ exposure\ calculation\ abbreviation.}$
- 2. Release activities are from engineering

report's Manufacturing (Mfg), Processing (Proc) and Use release activity labels.Multiple release activities are combined in one exposure scenario if

their releases occur at same location.

3.Exposure calculations are Acute

Dose Rate (ADR), Lifetime Average Daily Dose (LADD), and Probabilistic Dilution

Model (PDM). There may be one, two, or all three exposure calculations per

exposure scenario. CC is the aquatic concentration of concern.

4.This

 $column\ displays\ concentration\ values\ for\ the\ 7Q10\ streamflow,\ which\ is\ defined$

as the average daily streamflow of the seven consecutive days of lowest flow

within a ten year period.

	Scenario	Water(DtD					Der	mal	Inha	lation	
		Drinking Water		Fish In	gestion						
		ADR	LADD	ADR	LADD	7Q10cc	PDM	ADR	LADD	ADR	LADD
			mg/kg/day		mg/kg/day			mg/kg/day	mg/kg/day		
ı		mg/kg/day		mg/kg/day		ug/l	# Days			mg/kg/day	mg/kg/day

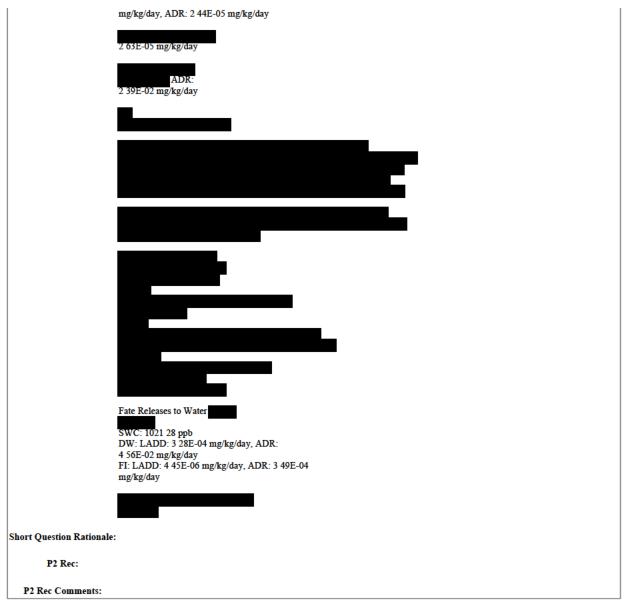
Result Table : Exposure Based(XB)/Persistent (P2B2) Criteria

Parameter	Exp Based	Persistent	Exceedence Value
Drinking(Surface) Water Dose (mg/kg/day)			
Fish Ingestion Dose (mg/kg/day)			
Inhalation Dose (mg/kg/day)			
Groundwater Dose (mg/kg/day)			

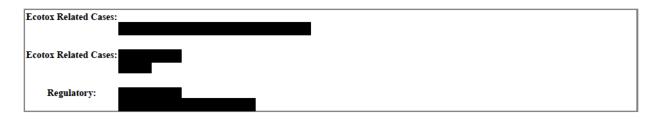
Parameter	Exp Based	Persistent	Exceedence Value
Surface Water Release After Treatment (kg/yr)			
Total Release After Treatment (kg/yr)			
Consumer Use?			

Regulatory Actions

Focus Decision Date: 10/31/2013 Focus Decision: LVE Conditional Grant Type of Decision: Rationale: L-13-0727 was given a conditional grant based on modifying the MSDS and binding to the production volume and PPE specified in the modified MSDS Absorption is nil through the skin for the neat material, moderate through the skin for the material in solution, and moderate through the lung and GI tract, based on physical/chemical properties Human health hazard concerns were moderate for severe irritation/possible corrosion to the eye, skin, and lung, dermal sensitization, acute, liver and developmental toxicities, mutagenicity, and oncogenicity, t data Workers are expected to be exposed via the dermal and inhalation routes The submitter must amend the MSDS to include impervious gloves, tight fitting goggles, and a NIOSH-certified particulate respirator Ecotoxicity hazard concerns were low based on submitted test data from the as well as QSARs Potential risks to the environment were low due to no exceedances of the COC during the release period This LVE was assessed at RAD will revise the ecotox report to reflect the submitted test data from cases COC: Chronic - 1,000 ppb, Acute - 20,000 ppb Summary of Exposures and Releases Fate Releases to Water SWC: 21 91 ppb LADD: 7 89E-06 mg/kg/day, ADR: 1 07E-03 mg/kg/day FI: LADD: 1 07E-07



Related Cases/Regulatory History

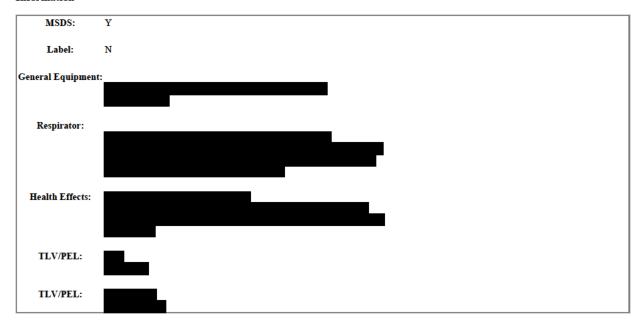


Testings

Tes	sting Ecotox 1:			
T	Testing Fate:			
Te	esting Fate 1:			

Testing Health 1:		
Testing Other:		

MSDS/Label Information



New Comments

Focus Input: